

HANFORD SITE AIR OPERATING PERMIT

In the matter of the compliance by the)
U.S. Department of Energy – Hanford Operations, with)
Section 70.94.161 RCW, Operating Permits for Air)
Contaminant Sources, and the applicable rules and)
regulations of Ecology.)

Number: 00-05-006
Issue Date: June 20, 2001
Effective Date: July 2, 2001
Expiration Date: July 1, 2006

In accordance with the provisions of Washington Administrative Code (WAC) Chapter 173-401, Operating Permit Regulation, the permittee, U.S. Department of Energy (DOE) at the Hanford Site is required to comply with provisions within this air operating permit, including provisions contained in all the Attachments identified below.

Attachments 1, 2, and 3 are integral and enforceable provisions of this permit.

Attachment 1 contains the State of Washington Department of Ecology (Ecology) permit terms and conditions.

Attachment 2 contains the State of Washington Department of Health (Health) Radioactive Air Emissions License terms and conditions.

Attachment 3 contains the Benton Clean Air Authority (BCAA) permit terms and conditions applicable to the regulation of open burning and asbestos.

The DOE at the Hanford Site is managed by two offices. The Office of River Protection (ORP) oversees the Hanford Site's tank waste remediation system at the 200 Area. The Richland Operation Office (RL) is responsible for the Hanford Site's environmental cleanup activities and the site-wide infrastructure issues. Their official addresses are listed below:

Department of Energy-RL
825 Jadwin Ave.
Richland, WA 99352

Department of Energy-ORP
P.O. Box 450
2440 Stevens Ave.
Richland, WA 99352

All terms and conditions (or underlying applicable requirements where regulations are paraphrased) are enforceable by the U.S. Environmental Protection Agency (EPA) and United States citizens unless specifically designated as not federally enforceable or listed as an inapplicable requirement in Table 5.1. (WAC 173-401-625). Any paraphrasing of regulations or other applicable requirements is for the convenience of the reader. The underlying applicable requirement is the enforceable requirement.

Regulatory Agency Relationships

EPA and Ecology

The Title V Air Operating Permit was added in the 1990 FCAA Amendment upon congressional authorization. Ecology is authorized to issue State AOPs under section 502 of the FCAA. Ecology may also delegate the federally approved state permit program to the regional air authorities. Per the EPA approved State Implementation Plan (Chapter 173-401 of the Washington Administrative Code), Ecology is the leading agency for this AOP.


Ecology and Health

A memorandum of understanding (MOU) describes the enforcement relationship and responsibilities of Ecology and Health on the Hanford Site. The MOU identifies Ecology as the lead agency for preparation and enforcement of the terms and conditions of this air operating permit. Health is identified in the MOU as the agency responsible for the enforcement of Attachment 2, the Hanford Site Air Operating Permit License Number FF-01. The MOU is included in its entirety in the Ecology Statement of Basis. The Ecology and Health Statements of Basis are supporting reference documents that provide a rationale for the development of the permit and offers clarification where deemed necessary. The Statements of Basis are non-enforceable.

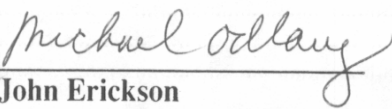
For purposes of this permit, the terms “permit” and “license” are synonymous and may be used interchangeably. Likewise, the terms “permittee” and “licensee” are synonymous and may be used interchangeably.

Ecology and Benton Clean Air Authority (BCAA)

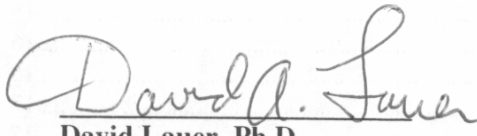
Ecology has exercised its authority under RCW 70.94 to regulate the airborne emissions of regulated air pollutants, with the exception of specific articles contained in Regulation 1, BCAA’s air pollution control regulation. BCAA enforces Article 5, Open Burning and Article 8, Asbestos on the Hanford Site. Attachment 3 identifies the BCAA open burning and asbestos requirements and the method of compliance utilized by the DOE.


Michael Wilson
Program Manager, Nuclear Waste Program
State of Washington Department of Ecology

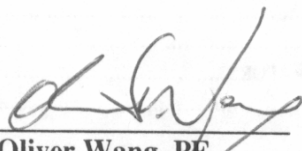
5/22/01
Date

for 
John Erickson
Director, Division of Radiation Protection
State of Washington Department of Health

5-15-2001
Date


David Lauer, Ph.D.
Control Officer
Benton Clean Air Authority

30 May 2001
Date


Oliver Wang, PE
Title V Permit Professional Engineer Reviewer
State of Washington Department of Ecology

5-21-2001
Date

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ATTACHMENT 1Ecology Permit

- 1. Emission Standards and Limitations
- 2. Compliance and Periodic Monitoring Provisions
- 3. Recordkeeping

ATTACHMENT 2Health License

- 1. Emission Standards
- 2. Applicable Requirement Terms
- 3. Monitoring, Testing, Quality Assurance, Reporting and Recordkeeping
- 4. Radioactive Air Emission Units Specific Applicable Requirements Tables

ATTACHMENT 3Benton Clean Air Authority Permit

1.0 ACRONYMS

ABCASH - Automated Bar Code Air Sample Hanford
ALARACT - As Low As Reasonably Achievable Control Technology
APEL - Applied Process Engineering Laboratory
AOP - Hanford Site Air Operating Permit
ASIL - acceptable source impact level
ATG - Allied Technology Group, Inc.
BACT - best available control technology
BARCT - best available radionuclide control technology
BCAA - Benton Clean Air Authority
BTU - British thermal units
CEO - Catalytic Electrochemical Oxidation (Unit)
CERCLA - *Comprehensive Environmental Response, Compensation and Liability Act of 1980*
CF - conversion factor
CFM - cubic feet per minute
CFR - Code of Federal Regulations
CO - carbon monoxide
CWC - Central Waste Complex
DCRT - double contained receiver tank
DOE - U.S. Department of Energy, Hanford Operations
DOE-ORP - U.S. Department of Energy, Office of River Protection
DOE-RL - U.S. Department of Energy, Richland Operations Office
DOP - dioctyl phthalate
DST - double-shell tanks
EAL - Environmental Analytical Laboratory
Ecology - State of Washington Department of Ecology
EFSEC -
EMSL - Environmental Molecular Science Laboratory
EPA - U.S. Environmental Protection Agency
ER - emission rate
ESPC - Energy Savings Performance Contract
ETF – 200 Areas Effluent Treatment Facility
FCAA - Federal Clean Air Act
FFCA - Federal Facility Compliance Agreement
FFTF - Fast Flux Test Facility
FGR - flue gas re-circulation
GCMP - gas cylinder management process
GCP - good combustion practices
gr/dscf - grains per dry standard cubic feet
HAP - hazardous air pollutant
Health - State of Washington Department of Health
HEPA - high-efficiency particulate air
HWTU - Hazardous Waste Treatment Unit
IEU - insignificant emission unit

INS - Interstate Nuclear Services
IXM - ion exchange module
JCS - job control system
lb/hr - pounds per hour
LERF - Liquid Effluent Retention Facility
LIGO - Laser Interferometer Gravitational-Wave Observatory
LNB - low NO_x burner
MEI - maximally exposed individual
mmBTU/hr - million British thermal units per hour
MOU - memorandum of understanding
NAAQS - National Ambient Air Quality Standards
NDA - nondestructive assessment
NESHAP - National Emission Standard for Hazardous Air Pollutants
NOC - notice of construction
NoC - notice of correction
NO_x - oxides of nitrogen
NRC - Nuclear Regulatory Commission
NSR - new source review
NMWMP - Nuclear and Mixed Waste Management Program of Ecology
ORP - U.S. Department of Energy, Office of River Protection
PFP - Plutonium Finishing Plant
PM₁₀ - particulate matter 10 microns or less
PNNL - Pacific Northwest National Laboratory
ppm - parts per million
ppmvd - parts per million volume dry
PSD - prevention of significant deterioration
PTRAEU - portable temporary radioactive air emission unit
PUREX - Plutonium-Uranium Extraction Plant
R&D - research and development
RACT - reasonably available control technology
RCHC - Richland Central Area
RCHN - Richland North Complex
RCW - Revised Code of Washington
RF - release fraction
RL - U.S. Department of Energy, Richland Operations Office
RMCS - rotary mode core sampling
SEM - scanning electron microscope
SO₂ - sulfur dioxide
SQER - small quantity emission rates
SST - single-shell tanks
TAPs - toxic air pollutants
TEDE - total effective dose equivalent
TEDF - Treated Effluent Disposal Facility
TRUSAF - Transuranic Storage and Assay Facility
TSD - treatment, storage and/or disposal

TWINS - Tank Waste Information Network System
VOC - volatile organic compound
WAC - Washington Administrative Code
WESF - Waste Encapsulation and Storage Facility
WRAP - Waste Receiving and Processing Facility
WSCF - Waste Sampling and Characterization Facility
WTP - Waste Treatment Plant

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2.0 GENERAL PROCESS INFORMATION

The Hanford Site, located in south central Washington State, occupies about 1,450 square kilometers (approximately 560 square miles) of semi-arid shrub and grasslands just north of the confluence of the Snake and Yakima Rivers with the Columbia River. This land, with restricted public access, provides a buffer for the smaller areas historically used for the production of nuclear materials, waste storage, and waste disposal. About 6% of the land area has been disturbed and actively is used. This 6% is divided into the following four areas:

- 100-B/C, 100-D, 100-DR, 100-F, 100-H, 100-K, and 100-N Areas, which lie along the south shore of the Columbia River in the northern portion
- 200 East and 200 West Areas, which lie in the center near the basalt outcrops of Gable Mountain and Gable Butte
- 300 Area, near the southern border, and includes the William R. Wiley Environmental Molecular Sciences Laboratory (EMSL)
- 400 Area, between the 300 and 200 Areas

Land between the operational areas is designated as the 600 Area.

Other areas and facilities that support Hanford Site activities can be found in the nearest cities (i.e. Richland, Kennewick, and Pasco). The facilities in these areas are not considered part of the Hanford Site major source because these areas are not considered contiguous to the Hanford Site. These areas include, but are not limited to, the following facilities:

- 700 Area in Richland, i.e., 825 Jadwin, 748 Building, and 712 Building on Jadwin Avenue.
- Richland Central (RCHC) Area, i.e., Butler Loop facilities and the Hanford Technical Training Center.

This AOP specifically excludes facilities not under the common control of the DOE and non-support facilities on leased land or within leased buildings. Facilities excluded at the time of AOP issuance are the following:

- Allied Technology Group Corporation, Richland facility
- Interstate Nuclear Services laundry
- Battelle Richland North facilities
- Applied Process Engineering Laboratory
- Laser Interferometer Gravitational-Wave Observatory
- all Energy Northwest (formerly Washington Public Power Supply System) facilities
- all Port of Benton facilities
- US Ecology, Inc. commercial low-level radioactive waste burial site
- Kaiser Aluminum and Chemical Corporation extrusion press located in an 1100 Area Building
- Framatome-ANP

- Livingston Rebuild Center, Inc.
- PN Services.

The Hanford Site was acquired by the federal government in 1943 and for many years was dedicated primarily to the production of plutonium for national defense and the management of the resulting waste. With the shutdown of the production facilities in the 1970s and 1980s, missions were redirected to decommission and site cleanup, and diversified to include research and development in the areas of energy, waste management, and environmental restoration. Decommissioned facilities or emission points are those that can not be operated as is, and are not planned to operate again. In an extremely unlikely event that a decommissioned facility or emission point is reactivated, an applicable requirements assessment must be completed first.

3.0 STANDARD TERMS AND CONDITIONS

Standard terms and conditions are provided in the following sections.

3.1 DUTY TO COMPLY

The permittee must comply with all conditions of this Chapter 401 permit. Any AOP noncompliance constitutes a violation of Chapter 70.94 Revised Code of Washington (RCW) and, for federally enforceable provisions, a violation of the FCAA. Such violations are grounds for enforcement action; for AOP termination, revocation and re-issuance, or modification; or for denial of an AOP renewal application. WAC 246-247 and WAC 173-460 are state-only enforceable requirements.

[WAC 173-401-620(2)(a)]

3.2 NEED TO HALT OR REDUCE ACTIVITY NOT A DEFENSE

It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

[WAC 173-401-620(2)(b)]

3.3 PERMIT ACTIONS

This AOP may be modified, revoked, reopened, reissued, or terminated for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, termination, or of a notification of planned changes or anticipated noncompliance does not stay any permit condition.

[WAC173-401-620(2)(c)]

3.4 PROPERTY RIGHTS

This AOP does not convey any property rights of any sort, or any exclusive privilege.

[WAC 173-401-620(2)(d)]

3.5 DUTY TO PROVIDE INFORMATION

The permittee shall furnish to Ecology, Health, or BCAA, within a reasonable time, any information that Ecology, Health, or BCAA may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit or to determine compliance with the permit. On request, the permittee also shall furnish to Ecology, Health, or BCAA copies of records required to be kept by the permit or, for information claimed to be confidential, the permittee may furnish such records directly to the administrator along with a claim of confidentiality.

Ecology, Health, or BCAA shall maintain confidentiality of such information in accordance with RCW 70.94.205.

[WAC 173-401-620(2)(e)]

[Note: The permittee shall provide requested classified documents to representatives of Ecology, Health or BCAA who have the appropriate security clearance and a demonstrable need to know. WAC 246-247-080(10) (state only)]

3.6 PERMIT FEES

The permittee shall pay fees as a condition of this AOP in accordance with the permitting authority's fee schedule. Failure to pay fees in a timely fashion shall subject the permittee to civil and criminal penalties as described in Chapter 70.94 RCW.

[WAC 173-401-620(2)(f)]

Per WAC 246-247-065 [Fees], fees for airborne emissions of radioactive materials shall be submitted in accordance with WAC 246-254-160. The licensee shall pay costs associated with direct staff time of the air emissions program in accordance with WAC 246-254-120 (1)(e). In any case where the licensee fails to pay a prescribed fee or actual costs incurred during a calendar quarter, Health (1) shall not process an application and (2) may suspend or revoke any license or approval involved; or (3) may issue any order with respect to licensed activities as Health determines appropriate or necessary to carry out the provisions of WAC 246-254-170. [WAC 246-247-065 (state only), WAC 246-254-120 (1)(e) (state only), WAC 246-254-170 (state only)]

3.7 EMISSIONS TRADING

No AOP revision shall be required under any approved economic incentives, marketable permits, emissions trading, and other similar programs or processes for changes that are provided in this permit.

[WAC 173-401-620(2)(g)]

3.8 SEVERABILITY

If any provision of this AOP is held to be invalid, all unaffected provisions of the permit shall remain in effect and be enforceable.

[WAC 173-401-620(2)(h)]

3.9 PERMIT APPEALS

This AOP or any condition in the AOP, including the attachments or any conditions in the attachments, may be appealed only by filing an appeal with the Pollution control Hearings Board and serving the appeal on the permitting authority within 30 days of receipt pursuant to

RCW 43.21B.310. This provision for appeal in this section is separate from and in addition to any federal rights to petition and review under Section 505(b) of the FCAA.
[WAC 173-401-620(2)(i), WAC 173-401-735]

3.10 PERMIT CONTINUATION

This AOP and all terms and conditions contained therein, including any permit shield provided under WAC 173-401-640, shall not expire until renewal permit has been issued or denied if a timely and complete application has been submitted. An application shield granted pursuant to WAC 173-401-705(2) shall remain in effect until the renewal permit has been issued or denied if a timely and complete application has been submitted.
[WAC 173-401-620(2)(j)]

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4.0 GENERAL CONDITIONS

4.1 PERMIT RENEWAL AND CONDITIONS

This AOP is issued for a fixed term of 5 years from the effective date of initial issuance. The permittee's right to operate this Chapter 401 source terminates with the expiration of this AOP unless a timely and complete renewal application is submitted at least 6 months but no earlier than 18 months before the date of AOP expiration. On receipt of a timely and complete application for renewal, this source may continue to operate subject to final action by Ecology, Health, and BCAA on the renewal application. This protection shall cease to apply if, subsequent to a completeness determination, the applicant fails to submit by the deadline specified in writing by Ecology, Health, or BCAA any additional information identified as being needed to process the renewal application. The application for renewal shall include the current AOP number, description of AOP revisions and off-permit changes that occurred during the permit term, and any applicable requirements that were promulgated and not incorporated into the AOP during the permit term. The renewal application should be sent to:

Program Manager
Nuclear Waste Program
State of Washington Department of Ecology.
1315 W. 4th Avenue
Kennewick, WA 99336-6018

and

Section Head
Air Emissions and Defense Wastes
Division of Radiation Protection
State of Washington Department of Health
Airdustrial Park, Bldg 5, PO Box 47827
Olympia, WA 98504-7827

and

Control Officer
Benton Clean Air Authority
114 Columbia Point Drive, Suite C
Richland, WA 99352

or other address, as directed by the agencies.

[WAC 173-401-610, WAC 173-401-710(1), WAC 246-247-060(6) (state only)]

4.2 TRANSFER OF OWNERSHIP OR OPERATION

This AOP is nontransferable by the DOE, the owner and operator. Future owners and operators must obtain a new AOP. A change of ownership or operational control of this source shall be

treated as an administrative permit amendment if no other changes in this AOP are necessary and provided that a written agreement containing a specific date for transfer of permit responsibility, coverage, and liability between the current and new permittee has been submitted to Ecology, Health, and BCAA.

[WAC 173-401-720(1)(d)]

4.3 SUBMITTALS

Reports, test data, monitoring data, notifications, and compliance certifications regarding nonradioactive air emissions, except asbestos and open burning, shall be submitted as specified in Attachment 1 to:

Program Manager
Nuclear Waste Program
State of Washington
Department of Ecology
1315 W. 4th Avenue
Kennewick, WA 99336-6018

or other address as directed by Ecology.

Reports, test data, monitoring data, notifications, and compliance certifications regarding radioactive air emissions shall be submitted as specified in Attachments 2 to:

Section Head
Air Emissions and Defense Wastes
Division of Radiation Protection
State of Washington Department of Health
Airdustrial Park, Bldg 5, PO Box 47827
Olympia, WA 98504-7827

or other address as directed by Health.

Reports, test data, monitoring data, notifications, and compliance certifications required to be sent to the EPA shall be submitted to:

U.S. EPA Region 10 Administrator
Air Permits, MS: OAQ-107
1200 Sixth Avenue
Seattle, WA 98101

or other address as directed by the EPA.

Reports, notifications, and compliance certifications regarding regulated asbestos activities shall be submitted as specified in Attachment 3 to:

Control Officer
Benton Clean Air Authority
114 Columbia Point Drive, Suite C
Richland, WA 99352

or other address as directed by the BCAA.

Reports, notifications, and compliance certifications regarding regulated open burning activities shall be submitted as specified in Attachment 3 to:

Control Officer
Benton Clean Air Authority
114 Columbia Point Drive, Suite C
Richland, WA 99352

or other address as directed by the BCAA.

The permittee shall promptly, on discovery, report to Ecology, Health, or BCAA, any material error or omission in these records, reports, plans, or other documents.

Any application form, report, or compliance certification submitted to Ecology, Health, or BCAA pursuant to this AOP shall contain a certification of truth, accuracy, and completeness by a responsible official. All certifications shall be in accordance with the requirements of WAC 173-401-520 and WAC 173-401-615.

4.3.1 Annual NESHAP Report

The annual report shall consist of the annual Radionuclide Air Emissions Report for the Hanford Site required by 40 CFR 61.94 and WAC 246-247 and shall include the following additional information per WAC 246-247-080(3):

1. Results of emission measurements for those emission units subject only to periodic confirmatory measurements
2. Wind rose or joint frequency table
3. Annual average ambient temperature
4. Annual average emission unit gas temperature, if available
5. Annual total rainfall
6. Annual average emission unit flow rate and total volume of air released during the calendar year.

In accordance with WAC 246-247-080(3), the report is due by June 30 for the previous calendar year's operation. If the additional information is available in another annual report, the licensee may provide a copy of that report along with the listed information requirements.
[WAC 246-247-080(3) (state only)]

4.3.2 Annual Air Emission Inventory

The permittee shall upon notification by the director of Ecology, maintain records on the type and quantity of emissions from the source and other information deemed necessary to determine whether the source is in compliance with applicable emission limitations and control measures. The annual emission inventory shall be submitted to Ecology (when required) no later than 105 days after the end of the calendar year. The annual air emissions inventory report will minimally contain information on nonradioactive air emissions:

- for emission points contained in AOP Attachment 1, *Tables 1.3, 1.4, 1.5 and 1.6*,
- for emission points where there is a specific approval condition that requires tracking in the report, and
- for other emission points as directed by Ecology.

[WAC 173-400-105]

4.3.3 Semiannual Reports

Semiannual reports shall be submitted by September 15th and by March 15th. The semiannual report submitted by September 15th shall contain information for the period from January 1 through June 30. The semiannual report submitted by March 15th shall contain information for the period from July 1 through December 31. The semiannual reports shall be in addition to the currently submitted reports. There are no semiannual reporting requirements for insignificant emission units (IEUs) defined by WAC 173-401-530, except those required by Ecology under WAC 173-400-105. Each semiannual report shall be certified consistent with WAC 173-401-520.

Each semiannual report shall contain the following information for the applicable reporting period (January 1 through June 30, or July 1 through December 31).

1. Each semiannual report will provide a reference to reports submitted to the regulatory agencies as required by General Conditions Section 4.5, "Permit Deviation Reporting".
2. Each semiannual report will consist of reports of any required monitoring not submitted according to Section 4.3 or reference to reports of required monitoring that were submitted previously during the reporting period.
3. Each semiannual report will contain a summary of any substantiated air emission complaint investigation(s) required in Table 1.2 of Attachment 1 and issued during the reporting period.
4. For all minor radioactive emission points (potential to emit <0.1 mrem to the maximally exposed individual (MEI) listed in Attachment 2, Tables 1.2, 1.3, and 2.1, each semiannual

report will confirm that any required monitoring was conducted to verify low emissions during the reporting period. The data derived from that monitoring will be reported in the annual NESHAP report (Section 4.3.1).

5. Each semiannual report will list any new regulatory orders, (e.g., Notice of Construction) imposed during the reporting period by Ecology or Health.
6. Each semiannual report will include a progress report on the compliance schedules identified in Section 4.8.

[WAC 173-401-615(3)(a)]

4.3.4 Annual Compliance Certification

The initial annual compliance certification will be submitted no later than 12 months following the effective date of the AOP. The annual compliance certification will be certified consistent with WAC 173-401-520. The compliance certification will consist of the following:

1. Each emission unit-specific term or condition listed in Attachments 1 and 2 tables, as well as Attachment 3 for asbestos and open burning
2. The compliance status
3. Whether compliance was continuous or intermittent
4. The method(s) used to determine the compliance status of the source over the reporting period consistent with WAC 173-401-615(3)(a)
5. Such other facts as Ecology, Health, or BCAA may require to determine the compliance status of the source.

All compliance certifications shall be submitted to Ecology, Health, or BCAA with a copy to EPA at the address shown in Section 4.3.

No certification shall be required for IEUs per WAC 173-401-530(2)(d).
[WAC 173-401-630(5)]

4.4 INSPECTION AND ENTRY

On presentation of appropriate credentials and equipped with appropriate personal protective equipment, the permittee shall allow Ecology, Health, BCAA, or an authorized representative to perform the following:

1. Enter, at reasonable times, upon the permittee's premises where a Chapter 401 source is located or emissions related activity is conducted, or where records must be kept under the conditions of this permit.

2. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit.
3. Inspect, at reasonable times, any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this AOP. Health may require a demonstration of as low as reasonably achievable control technology (ALARACT) at any time. Where controlled access areas will be entered, Ecology, Health, or BCAA shall provide a reasonable advance notice and enter in the presence of a facility representative.
4. Sample or monitor, at reasonable times, substances or parameters for the purpose of assuring compliance with the permit.

Nothing in this condition shall limit the ability of EPA to inspect or enter the premises of the permittee under Section 114 or other provisions of the FCAA.

No person shall obstruct, hamper, or interfere with any such authorized representative while in the process of carrying out their official duties. In the event the hazards associated with accessibility to a unit require training and/or restrictions or requirements for entry, the permittee shall inform Ecology, Health, or BCAA before arrival of those restrictions or requirements. The permittee shall be responsible for providing the necessary training, escorts, and support services to allow Ecology, Health, or BCAA to inspect.

[WAC 173-401-630(2), WAC 246-247-080(1) (state only), WAC 246-247-080(9) (state only)]

4.5 PERMIT DEVIATION REPORTING

The permittee shall report deviations from permit conditions, including those attributable to upset conditions as defined in this permit, the probable cause of such deviations, and any corrective actions or preventative measures taken.

4.5.1 Potential Threats to Human Health or Safety

Deviations, which represent a potential threat to human health or safety, shall be reported promptly or as soon as possible. Promptly, as defined here, means as soon as possible following discovery¹, but in no case later than 12 hours after discovery¹ of a potential threat to human health or safety. This notice shall contain a description of the emergency, any steps taken to mitigate emissions, and corrective actions taken. This notice fulfills the immediate reporting requirements of WAC 173-401-615(3)(b), WAC 173-400-107(3) and WAC 246-247-080(5) (state only).

¹ Qualitative determination that a potential threat to public health or safety exists or existed after an evaluation of pertinent information.

4.5.2 Non-health or Safety Related Deviations

Other deviations from AOP requirements or excess emissions shall be reported within 30 days after the end of the month during which the deviation is discovered or as part of routine emission monitoring reports.

[WAC 173-401-615(3)(b) and WAC 173-400-107(3)]

Additional written reports may be required by either Ecology or Health, according to the requirements of WAC 173-400-107(3) or WAC 246-247-080(5) (state only) respectively.

Notification must be given to Health within 24 hours (or during the course of the next normal business day) from the time of discovery¹ of the condition or emission that would require notification pursuant to WAC 246-247-080(5) (state only). Such notification shall be required for other than normal operations when a potential or actual release of radionuclides to the air is due to any one or more of the following:

1. Non-routine bypass or failure of required abatement control technology identified in Tables 1.1 and 1.2 of Attachment 2
2. Non-routine and/or unexpected operational changes affecting emissions
3. An exceedance of the dose standard of 10 mrem/yr for the Hanford Site
4. An exceedance of emission limits or conditions in a regulatory order (e.g., NOC, enforcement actions, or license).

The facility shall file a report of closure with Health whenever operations producing emissions of radioactive material permanently are ceased at any emission unit (except temporary emission units) regulated under this chapter. The closure report shall indicate whether, despite cessation of operations, there is still a potential for radioactive air emissions and a need for an active or passive ventilation system with emission control and/or monitoring devices. If decommissioning is planned and will constitute a modification, a NOC shall be required, as applicable, in accordance with WAC 246-247-060.

[WAC 246-247-080(6)]

The licensee shall respond in writing in a timely manner, or within a time limit set by Health per WAC 246-247-080(11) (state only), to inspection results that require a facility to implement corrective actions or any other actions so directed by Health.

The permittee may seek to establish that excess emissions were unavoidable because of startup or shutdown conditions, maintenance, or upset conditions, in accordance with WAC 173-400-107. The permittee also may seek to establish that noncompliance with a technology-based² emission limitation under this AOP was because of an

² Technology-based emission limits are those established on the basis of emission reductions achievable with various control measures or process changes (e.g., a new source performance standard) rather than those established to attain a health based air quality standard.

emergency³, in accordance with WAC 173-401-645. To do so, the permittee shall demonstrate the affirmative defense of emergency through properly signed, contemporaneous operating logs, or other relevant evidence that:

1. An emergency occurred and that the permittee can identify the cause(s) of the emergency;
2. The permitted facility was at the time being properly operated;
3. During the period of the emergency the permittee did not allow the condition to persist and took all reasonable steps to minimize levels of emissions that exceeded the emissions standards, or other requirements in this permit; and
4. The permittee submitted notice of the emergency to Ecology (non-radiological emissions) and Health (radiological emissions) within 24 hours of the time when emission limitations were discovered exceeded due to the emergency, and within 12 hours when there is a threat to human health. This notice must contain a description of the emergency, any steps taken to mitigate emissions, and corrective actions taken. This notice fulfills the requirements of WAC 173-401-615.

[WAC 173-400-107, WAC 173-401-615, WAC 173-401-645, WAC 246-247-080 (state only)]

4.6 REOPENING FOR CAUSE

The Ecology, and/or Health, or BCAA, acting through Ecology, shall re-open and revise this AOP, as necessary, in the following circumstances.

1. Additional requirements become applicable to the Hanford Site 3 or more years before the expiration date of this AOP. Such a re-opening shall be completed no later than 18 months after promulgation of the applicable requirement. No such re-opening is required if the effective date of the requirement is later than the expiration date of this AOP, unless the original AOP or any terms and conditions have been extended pursuant to WAC 173-401-620(2)(j).
2. Ecology, Health, BCAA, or the EPA determines that this AOP contains a material mistake or inaccurate statements were made in establishing the emissions standards or other terms or conditions.
3. Ecology, Health, BCAA, or the EPA determines that the AOP must be revised or revoked to ensure compliance with the applicable requirements.

³ An “emergency” means any situation arising from sudden and reasonably unforeseeable events beyond the control of this source, including acts of God, which situation requires immediate corrective action to restore normal operation, and that causes this source to exceed a technology-based emission limitation under this permit, due to unavoidable increases in emissions attributable to the emergency. An emergency shall not include noncompliance to the extent caused by improperly designed equipment, lack of preventative maintenance, careless or improper operation, or operator error.

Re-openings shall not be initiated before a notice of intent to re-open is provided to the permittee by Ecology at least 30 days in advance of the date that this AOP is to be re-opened, except that Ecology, Health, or BCAA may provide a shorter period in the case of an emergency.

All AOP conditions remain in effect until such time as Ecology takes final action. Respective regulatory agencies may take temporary corrective measures in cases of material mistakes or potential negative impact to public health.

[WAC173-401-730]

4.7 MONITORING

Under the requirements of WAC 246-247-075(9), Health may conduct an environmental surveillance program to ensure that radiation doses to the public from emission units are in compliance with applicable standards. Health may require the operator of an emission unit to conduct stack sampling, ambient air monitoring, or other testing as necessary to demonstrate compliance with the standards in WAC 246-247-040.

4.8 COMPLIANCE SCHEDULES

The schedules in this section are identified pursuant to WAC 173-401-630(3).

NESHAP FFCA (The FFCA Compliance Schedule is a standalone document.)

The FFCA between EPA, Region 10 and DOE was signed February 7, 1994. The purpose of the FFCA is to provide a compliance plan and schedule to bring certain existing Hanford Site stack sampling/monitoring systems into compliance with requirements in 40 CFR 61, Subpart H.

For those schedules of compliance identified in this section, the permittee shall report progress against the compliance schedule semiannually in accordance with Section 4.3.3. The progress report shall contain the date(s) for achieving compliance, the date(s) when compliance was achieved, and shall provide an explanation of why any date(s) in the schedule of compliance was not or will not be met, and any preventive or corrective measures adopted.

[WAC 173-401-630(4)]

4.9 NEW SOURCE REVIEW APPLICABILITY

The permittee shall not be allowed to construct or operate new or modified emission units without previous approval pursuant to the new source review requirements except as allowed by regulations. Additionally, before a deactivated emission unit is re-activated, an applicable requirements assessment shall be performed. This applicable requirements assessment shall include a determination of the applicability of the new source review requirements.

[WAC 173-400-110, WAC 173-460-040 (state only), and WAC 246-247-060 (state only)]

4.10 EMISSION STANDARDS AND CONTROLS FOR SOURCES EMITTING GASOLINE VAPORS

Stage 1 requirements are applicable to 20 eastern Washington counties (including Benton County) with new gasoline dispensing facilities greater than 10,000 gallons storage capacity (Table 1.7 in Attachment 1). Total annual throughput records shall be maintained for the most recent 2- year period.
[WAC 173-491]

4.11 STRATOSPHERIC OZONE PROTECTION

The permittee shall comply with the labeling, procurement, maintenance, service, repair, and disposal standards relevant to stratospheric ozone protection under 40 CFR 82. Records shall be maintained as required.
[40 CFR 82]

4.12 ACCIDENTAL RELEASE PREVENTION REQUIREMENTS: RISK MANAGEMENT PROGRAMS UNDER THE CLEAN AIR ACT, SECTION 112(R)(7).

The Hanford Site is subject to Part 68 and shall certify compliance with all requirements of 40 CFR 68 as part of the annual compliance certification as required by 40 CFR § 70.6(c)(5). This requirement applies to the 283-W Water Treatment Plant (WTP) for the risk management of potential accidental release of chlorine (Table 1.7 in Attachment 1).
[40 CFR 68.215]

4.13 APPROVAL ORDER TERMS AND CONDITIONS THAT BECOME IRRELEVANT DURING THE TERM OF THIS PERMIT.

Nothing herein shall be construed to preclude the permittee from making changes consistent with Chapter 401 that would render existing AOP compliance terms and conditions irrelevant.
[(WAC 173-401-725(4)(a))]

4.14 MONITORING AND ASSOCIATED RECORDKEEPING FOR EMISSION UNITS WITHOUT CONTINUOUS OPERATION

1. For Emission Units with Nonradioactive Air Emissions Conditions

The permittee is not required to conduct the monitoring and associated recordkeeping for any emission unit if the emission unit did not operate at any time between required monitoring events (e.g., if the monitoring requires recording pressure drop daily, such readings would not be required on any full day in which the emission unit did not operate), provided the following conditions are met.

- (a) In the case of a permanent shut down of the emission unit:
 - (i) the permittee makes a contemporaneous record in a log or file maintained on site of the date and time that the emission unit ceased operation.
 - (ii) the permittee shall provide written notice to Ecology within a reasonable time.
- (b) In the case of a temporary shut down of the emission unit:
 - (i) the permittee makes a contemporaneous record in a log or file maintained on site of the date and time that the emission unit ceased operation and the reason why the emission unit did not operate.
 - (ii) the permittee makes a contemporaneous record in a log or file maintained on site of the date and time that the emission unit resumed operation.
 - (iii) the periodic report of monitoring required by Standard Terms and Conditions Section 4.3.3, "Semiannual Reports", and/or the specific permit condition includes a summary of the period or periods when the emission unit did not operate.

2. For Emission Units with Radioactive Air Emission Conditions

The licensee is not required to conduct the monitoring and associated recordkeeping for any emission unit if the emission unit did not operate at any time between required monitoring events (e.g., if the monitoring requires continuous sampling, such readings would not be required on any full day in which the emission unit did not operate), provided the following conditions are met.

- (a) In the case of a permanent shut down of the emission unit:
 - (i) the licensee completes the monitoring and associated recordkeeping for that period before the shutdown.
 - (ii) the licensee files a report of closure with Health in accordance with WAC 246-247-080(6). An emission unit will not be considered to be shut down permanently or completed until a report of closure is received by Health.

Note: These conditions do not apply to temporary radioactive emissions units (e.g., high-efficiency air particulate (HEPA) vacuums or portable/temporary radioactive air emission units (PTRAEUs), etc).

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5.0 PERMIT SHIELD

5.1 APPLICABLE REQUIREMENTS

Compliance with the AOP conditions that are identified specifically in the “Standard Terms and Conditions” and “General Conditions” sections (Sections 3.0 and 4.0) and Attachments 1 and 2 shall be deemed compliant with the applicable requirements on which that condition is based, as of the date of AOP issuance. The permit shield does not apply to IEUs or activities identified in WAC 173-401-530.

Exclusions include the following.

1. Nothing in this AOP shall alter or affect the liability of the permittee for the following.
2. The provisions of Section 303 of the FCAA (emergency orders), including the authority of the administrator under that section
3. The liability of the permittee for any violation of applicable requirements prior to or at the time of permit issuance
4. The applicable requirements of the acid rain program, consistent with Section 408(a) of the FCAA
5. The ability of EPA to obtain information from a source pursuant to Section 114 of the FCAA
6. The ability of Ecology to establish or revise requirements for the use of reasonably available control technology (RACT) as provided in Chapter 252, Laws of 1993.
[WAC 173-401-640(1)]

5.2 INAPPLICABLE REQUIREMENTS

Ecology has determined that the Hanford Site, including all sources, is not subject to certain requirements. In accordance with the provisions of WAC 173-401-640(2), inapplicable requirements at the time of AOP issuance are shown in Table 5-1. The permit shield shall apply to these inapplicable requirements.
[WAC 173-401-640(2)]

5.3 STATEMENT OF BASIS

The Statement of Basis (Statement) is issued by the permitting agencies as a separate supporting reference document to this air operating permit. This Statement is non-enforceable and sets forth the legal and factual basis for AOP conditions. The Statement includes references to the applicable statutory or regulatory provisions, technical supporting information on specific emission units, and clarifications of specific requirements.
[WAC 173-401-700(8)]

Table 5-1. Inapplicable Requirements.

Requirement	Reason for inapplicability
WAC 173-400-040(3)(b)	The site is not located in a nonattainment area.
WAC 173-400-040(8)(b)	The site has not been indicated as a significant contributor to a PM-10 nonattainment area.
WAC 173-400-060	No general process units have been identified on the Hanford Site.
WAC 173-400-070	None of the facilities described exist on the site.
WAC 173-400-105(5)(b)(c)(d)	No facilities as described exist on the Hanford Site.
WAC 173-400-112	The Hanford Site is not located in a nonattainment area.
WAC 173-400-151	The Hanford Site has not been identified as a cause or contributor to visibility impairment in any mandatory Class I area.
WAC 173-400-190	The Hanford Site is not located in a nonattainment area.
WAC 173-400-210	The Hanford Site always has been regulated by Ecology. No local authority previously has regulated the Hanford Site.
WAC 173-421, Motor Vehicle Emission Control Systems	The site is not located in a noncompliance area or emission contributing area requiring a vehicle inspection program.
WAC 173-422, Motor Vehicle Emission Inspection	The site is not located in a noncompliance area or emission contributing area requiring a vehicle inspection program.
WAC 173-490, Emission Standards and Controls for Sources Emitting Volatile Organic Compounds	This supplements WAC 173-400 and applies to VOC sources in ozone nonattainment areas. The site is not located in a designated ozone nonattainment area.
WAC 173-492, Motor Fuel Specifications for Oxygenated Gasoline	The site is not located in the control areas requiring oxygenated gasoline use.
WAC 246-247-060(10)	The permittee does not operate a commercial nuclear power plant.
WAC 246-247-075(5)(7)	The permittee does not have point source emissions from NRC licensed facilities. Any NRC license would be to handle a specific sealed source term.
WAC 463-39, General Regulations for Air Pollution Sources	The site emission sources are not subject to EFSEC jurisdiction/authority.
Preconstruction permits issued under Title I Part D Plan Requirements for Nonattainment Areas WAC 173-400-112	The site and surrounding areas have never been determined to be in nonattainment of NAAQS's, therefore permits under this provision have not been required.
Pre-construction permits issued under Title I Part C (PSD) PSD-X80-14	The facilities identified in PSD-X80-14 have been shut down; therefore no applicable requirements are identified in this permit.
40 CFR 72 - 78 WAC 173-406	Steam generators on the site are not included in the acid rain control program and the site does not opt in at this time.
BCAA, Regulation 1, Articles 1, 2, 3, 4, 6, 7, 9	Authority to regulate Hanford Site air emissions pre-empted by Ecology (Statement of Basis), except for Articles 5 and 8.
40 CFR 60, Subpart Kb	Storage vessels subject to recordkeeping requirements only are exempt from 40 CFR 60, Subpart Kb.